

WHELEN[®]

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Installation Guide: 90777()-series Models 90777L0, R0, L1, R1 P/Ns: 01-0790777-L0, R0, L1, R1 LED Position/Anti-Collision Light Assembly

TSO-C30c
 TYPE I, II
 APPROVED



TSO-C96a
 CLASS II
 APPROVED

The conditions and tests required for TSO approval of this article are minimum performance standards. It is the responsibility of those installing this article either on or within a specific type or class of aircraft to determine that the aircraft installation conditions are within the TSO standards. TSO articles must have separate approval for installation in aircraft. The article may be installed only if performed under 14 CFR part 43 or the applicable airworthiness requirements.

SPECIFICATIONS:

- Nominal Operational Voltage:**..... 28 VDC
 (Operation from 22-32 VDC)
- Input Current:**
- Anti-Collision Light (Avg.):..... 0.47 Amps
 - Anti-Collision Light (Pulse@.25 Sec.)..... 2.5 Amps
 - Position Light..... 0.25 Amps
 - Recognition Light (Optional)..... 0.45 Amps
- Flashrate:**..... 45 ±5 / Min.
- Weight (Ref)**
- L0, -R0 1.9 lbs.
 - L1, -R1 1.5 lbs.

EQUIPMENT LIMITATIONS: An approved forward lighting system consists of two lights, one located on each wingtip.

The baseplate must be mounted parallel to the vertical and horizontal centerlines of the aircraft to project the patterns properly.

The light assembly must be mounted behind a clear lens.

Certain types of aircraft may require additional testing.

CONTINUED AIRWORTHINESS: The forward position light is designed with 3 Green or 4 Red LEDs. Should any one forward position LED fail, the unit must be repaired or replaced. The anti-collision light is designed with 6 banks of 6 LEDs. If any one LED fails, the unit will still meet the light output requirements. If two or more LEDs fail, the unit must be repaired or replaced.

Note: The anti-collision light will automatically shut-off after 20 flashes if a failure of a bank is detected.

Note: To reduce eye strain use an optical filter such as dark glasses or a blue covering dome during LED inspection.

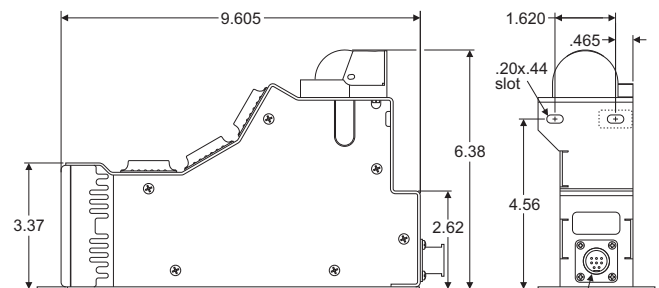
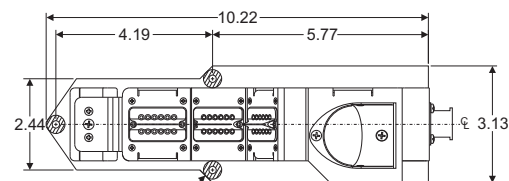
INSTALLATION PROCEDURES: The following information is to assist in the installation of a Whelen Light System.

1. Choose the appropriate light assembly.
2. Using the mounting detail information provided, prepare the aircraft for means to secure the light assembly.
3. Connect the light inputs according to the chart shown. Connect the power lead to an appropriately sized breaker. Connections to be in accordance with FAA approved methods.

Note: SYNC is a low power input control signal. Connecting to an output synchronize signal of a Whelen LED anti-collision assembly will cause the lights to flash at the same time. If synchronization is not necessary, the connection may be left open.

CAUTION: Do not touch the LED with either fingers or sharp objects. This could soil and/or damage the lens and effect the optical performance of the LEDs.

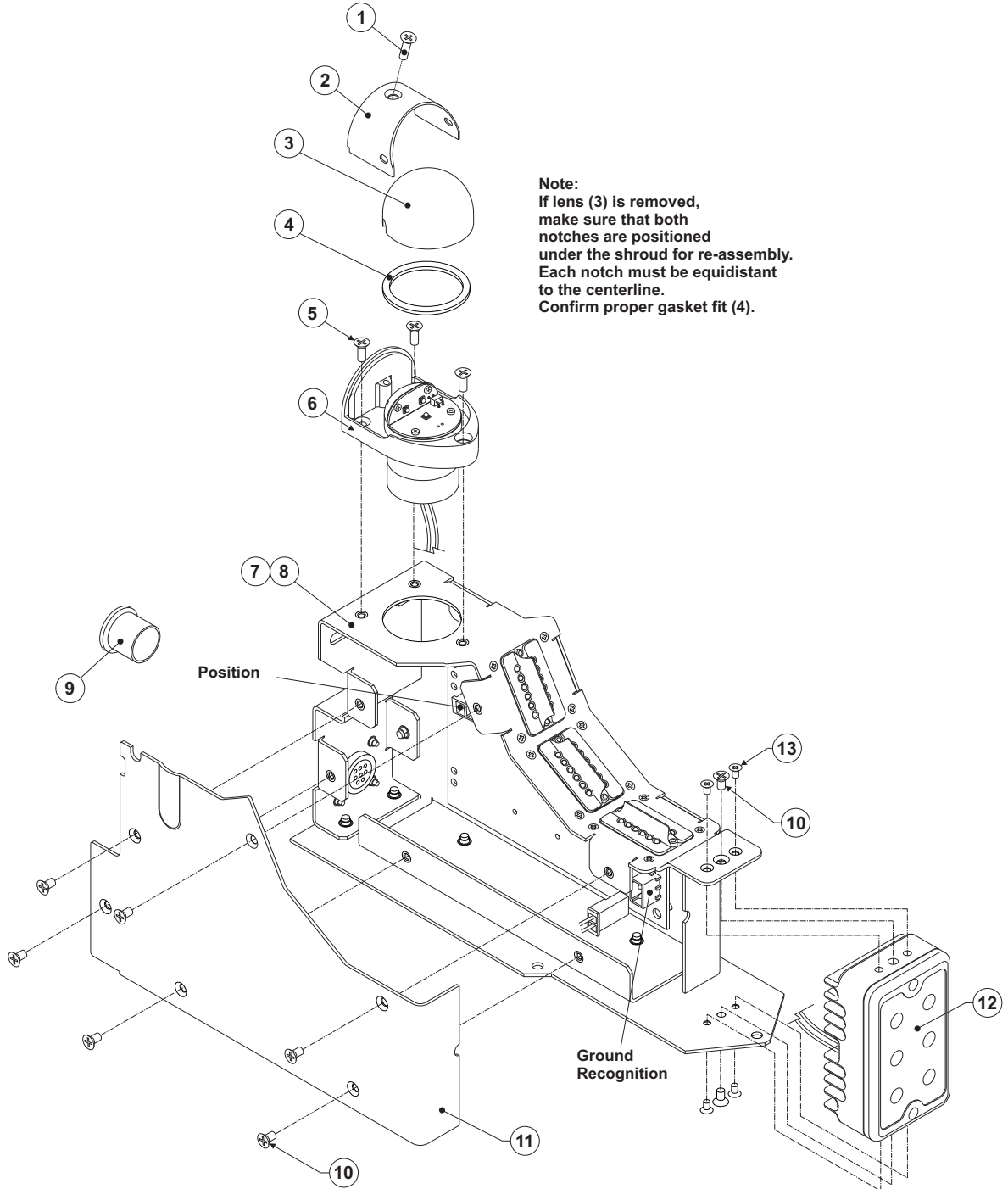
4. Using the appropriate hardware install the baseplate (3 places) to the aircraft. Insure that all leads are clear of any obstructions and secured as required.
5. Using the appropriate hardware, attach the aft surface to the aircraft at the upper slot, as required.
6. Check all avionics systems for interference from this installation.
7. A flight check should be performed by a properly certified pilot.
8. Update aircraft records, If required complete Form 337 and obtain FAA field approval for installation.



Connector Pin Out	
1	+28VDC POS
2	+28VDC REC
3	+28VDC ANTI-COL
4	SYNC (INPUT)
5	GROUND

Aviation

QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
	*		01-0790777-L0	LEFT POSITION/ANTI-COLLISION LIGHT w/REC
*			01-0790777-L1	LEFT POSITION/ANTI-COLLISION LIGHT w/o REC
1	1	1	14-0050508B31	SCREW, 6-32 x 5/8 PFHMS (MS51959-31B)
1	1	2	19-171596-200	RETAINER, LENS BLACK ANODIZED
1	1	3	68-3950902A30	LENS, HARDCOAT
1	1	4	38-0231440-00	GASKET, LENS
3	3	5	14-0050563B28	SCREW, 6-32 x 1/2 BLK P100FH/CSNK MS24693-28B
1	1	6	01-0271850-52	ASSY, LIGHTHEAD 28V BLACK ANODIZED, RED
-	1	7	01-0290786-L0	SUB ASSEMBLY, LED LEFT ANTI-COLLISION LIGHT w/REC
1	-	8	01-0290786-L1	SUB ASSEMBLY, LED LEFT ANTI-COLLISION LIGHT w/o REC
1	1	9	22-0415625-00	DUST CAP
6	8	10	14-0050563B24	SCREW, 6-32 x 1/4 BLK P100FH/CSNK MS24693-24B
1	1	11	07-790781-L23	SIDE PANEL "B" LEFT HAND, BLACK
-	1	12	01-0271878-20	MODEL 7187820 TIR 2X3, 28V RECOGNITION LIGHT
-	4	13	14-0050581B02	SCREW, 4-40 x 1/4 P100FH/CSNK BLK MS24693-2B



QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
	*		01-0790777-R0	RIGHT POSITION/ANTI-COLLISION LIGHT w/REC
*			01-0790777-R1	RIGHT POSITION/ANTI-COLLISION LIGHT w/o REC
1	1	1	14-0050508B31	SCREW, 6-32 x 5/8 PFHMS (MS51959-31B)
1	1	2	19-171596-200	RETAINER, LENS BLACK ANODIZED
1	1	3	68-3950902A30	LENS, HARDCOAT
1	1	4	38-0231440-00	GASKET, LENS
3	3	5	14-0050563B28	SCREW, 6-32 x 1/2 BLK P100FH/CSNK MS24693-28B
1	1	6	01-0271850-51	ASSY, LIGHTHEAD 28V BLACK ANODIZED, GREEN
-	1	7	01-0290786-R0	SUB ASSEMBLY, LED RIGHT ANTI-COLLISION LIGHT w/REC
1	-	8	01-0290786-R1	SUB ASSEMBLY, LED RIGHT ANTI-COLLISION LIGHT w/o REC
1	1	9	22-0415625-00	DUST CAP
6	8	10	14-0050563B24	SCREW, 6-32 x 1/4 BLK P100FH/CSNK MS24693-24B
1	1	11	07-790781-R23	SIDE PANEL "B" RIGHT HAND, BLACK
-	1	12	01-0271878-20	MODEL 7187820 TIR 2X3, 28V RECOGNITION LIGHT
-	4	13	14-0050581B02	SCREW, 4-40 x 1/4 P100FH/CSNK BLK MS24693-2B

Note:
 If lens (3) is removed, make sure that both notches are positioned under the shroud for re-assembly. Each notch must be equidistant to the centerline. Confirm proper gasket fit (4).

